

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.15**SOURCE INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** SIR-002928**Date Inspected:** 23-Nov-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Changxing Dao, Shanghai**Quality Control Contact:** Don Walton**Quality Control Present:** Yes No**Material transfer:** Yes No N/A**Sampled Items:** Yes No N/A**Stock Transfer:** Yes No N/A**OK to Cut:** Yes No N/A**Rebar Test Witness:** Yes No N/A**Delayed/Cancelled:** Yes No N/A**Other:** Coatings Inspection**Bridge No:** 34-0006**Component:** Sub-Assemblies (OBG), OBG and Office.**Bid Item:** 77, 78, 79**Lot No:****Summary of Items Observed:**

On this date Caltrans Office of Structural Materials (OSM) Quality Assurance (QA) NACE III coating inspector, Mr. Kenneth W. Cason Jr. arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island in Shanghai, China. The purpose of the coating inspections is to monitor the surface preparation and coating applications for the SAS Bay Bridge project. This QA NACE III coating inspector observed the following:

Sub-Assemblies (OBG)

Crash Barrier External Surfaces (32 Each), NOI Number 5112: In preparation for final coat installation of Interfine 979 Polysiloxane, the Interzinc 22 undercoat on Crash Barrier External Surfaces (32 Each) was tested in accordance with SSPC-SP 1 (Surface Cleanliness). ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for inspection due to defects (grinding/sanding) in the applied Interzinc 22 undercoat.

Crash Barriers (12 Each), Assembly Plates (2 Each) and Diaphragm (2 Each), NOI Number 5115: In preparation for undercoat installation and in accordance with project specifications, this inspector along with ABF and ZPMC Quality Assurance/Control representatives observed the surface preparation on Crash Barriers (12 Each), Assembly Plates (2 Each) and Diaphragm (2 Each). Recorded x3 surface profile readings in the range of 83 to 84 µm and x1 soluble salts reading of 10.4 (µs/cm). ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for inspection due to unsatisfactory surface preparation (blasting).

Crash Barrier External Surfaces (32 Each), NOI Number 5119: In preparation for final coat installation of Interfine 979 Polysiloxane, the Interzinc 22 undercoat on Crash Barrier External Surfaces (32 Each) was tested in

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accordance with SSPC-SP 1 (Surface Cleanliness). No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Bike Path Panel 6A-002 (1 each), NOI Number 5120: In preparation for finish coat installation of Interfine 979 Polysiloxane, the Bike Path Panel 6A-002 (1 each) was tested in accordance with SSPC-SP 1 (Surface Cleanliness). No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

OBG

12AW OBG Internal Ceiling, NOI Number 5113: In accordance with project specifications ABF and ZPMC Quality Assurance/Control representatives observed the surface condition on 12AW OBG Internal Ceiling for dry film thickness (DFT) compliance. ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for inspection due to defects (dry spray, low DFT readings and holidays) in the applied Interzinc 22 undercoat.

12AW OBG External Surfaces, NOI Number 5114: In preparation for mist coat installation of Interfine 979 Polysiloxane, the Interzinc 22 undercoat on 12AW OBG External Surfaces was tested in accordance with SSPC-SP 1 (Surface Cleanliness), SSPC-PA 2 Dry Film Thickness (DFT), ISO 11127-6, ISO 11127-7 (Residual Chlorides) and ASTM D4752 (MEK Resistance of Ethyl Silicate (Inorganic) Zinc-Rich Primers by Solvent Rub). Test results recorded x2 soluble salts reading of 15.5 and 15.6 ($\mu\text{S}/\text{cm}$) and x6 MEK resistance 5 @ grade 5 and 1 @ grade 4. ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for inspection due to holidays in the applied Interzinc 22 undercoat and additional required surface cleaning.

12BW OBG Internal Ceiling Surfaces, NOI Number 5116: In preparation for undercoat installation and in accordance with project specifications, this inspector along with ABF and ZPMC Quality Assurance/Control representatives observed the surface preparation on 12BW OBG Internal Ceiling Surfaces. Recorded x2 soluble salts readings of 18.3 and 13.7 $\mu\text{S}/\text{cm}$. ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for inspection due to required weld repairs and unsatisfactory surface preparation (blasting).

12AW OBG External Surfaces, NOI Number 5117: In preparation for mist coat installation of Interfine 979 Polysiloxane, the Interzinc 22 undercoat on 12AW OBG External Surfaces was tested in accordance with SSPC-SP 1 (Surface Cleanliness) and SSPC-PA 2 Dry Film Thickness (DFT). ABF Quality Assurance personnel noted discrepancies (mud cracks and low DFT readings between FL-3 and OBG Side Plates). ZPMC elected to mask off (cover) these areas and re-work after applying mist coat to remaining surfaces. ZPMC will re-work the defective areas and re-submit for inspection prior to proceeding with process to the next check point.

12AW OBG Internal Ceiling, NOI Number 5118: In accordance with project specifications ABF and ZPMC Quality Assurance/Control representatives observed the surface condition on 12AW OBG Internal Ceiling for dry film thickness (DFT) compliance. ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for inspection due to defects (low DFT readings and holidays) in the applied Interzinc 22 undercoat.

Office

Attend to report writing and photo documentation.

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Note: Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact , who represents the Office of Structural Materials for your project.

Inspected By:	Cason,Kenneth	Quality Assurance Inspector
Reviewed By:	Miller,Mark	QA Reviewer
